1   Claim 1.   A method for implementing a segmentation addressing

2   operation comprising the steps of:

3   providing a first logical address and a segment,

4   deriving a linear address from the logical address and the segment in a

5   first discrete sub-step in which the properties of a logical address are

6   checked to determine whether those properties are consistent with the

7   criteria for addressing the segment, and

8   performing a base add operation to determine the linear address in a

9   second discrete sub-step.

1   Claim 2.   A method for implementing a segmentation operation

2   comprising the steps of:

3   providing a first segment selector for deriving a linear address of a

4   segment descriptor in a first descriptor table,

5   providing a second segment selector for deriving a linear address of a

6   segment descriptor in a second descriptor table,

7   attempting an access of the first descriptor table to derive a segment

8   descriptor,

9   attempting an access of the second descriptor table to derive a segment

10   descriptor if the access of the first descriptor table fails, and

11   storing a derived segment descriptor from a successful attempted access

12   in a descriptor register.

1   Claim 3.   A method as claimed in Claim 2 in which any attempt to

2   access is divided into discrete sub-steps comprising:

3   checking properties of a logical address to determine whether those

4   properties are consistent with the criteria for addressing a first descriptor

5   table in a first discrete sub-step of deriving a linear address, and

6   performing a base add operation to determine the linear address as a

7   second discrete sub-step of deriving a linear address.